AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-22. (cancelled)

23. (Currently Amended) ~~The communication system of claim 1,~~

A communication system for use with a packet-based network comprising:

a first node configured to transmit data in data packets across the network; and

a second node configured to receive the data packets from the network and serialize the data;

wherein the second node includes a buffer, said buffer being configurable to adjust to network packet delay variance through analysis of a packet delay variance measurement, as measured over at least one period of time,

wherein the packet delay variance measurement includes monitoring, for the at least one period of time, a buffer depth of the buffer, the buffer depth being a temporal measurement of a delay that a data packet encounters from when the data packet is received by the buffer to when the data packet is serialized,

wherein, in a first phase of operation, a plurality of buffer parameters are set to predetermined values, and

wherein, in a second phase of operation, in response to the monitoring of the buffer depth of the buffer, one or more of the buffer parameters having been set and a clock frequency of the second node are automatically adjusted.

24. (Currently Amended) ~~The communication system of claim 1,~~ A communication system for use with a packet-based network comprising:

a first node configured to transmit data in data packets across the network; and

a second node configured to receive the data packets from the network and serialize the data;

wherein the second node includes a buffer, said buffer being configurable to adjust to network packet delay variance through analysis of a packet delay variance measurement, as measured over at least one period of time,

wherein the packet delay variance measurement includes monitoring, for the at least one period of time, a buffer depth of the buffer, the buffer depth being a temporal measurement of a delay that a data packet encounters from when the data packet is received by the buffer to when the data packet is serialized, and

wherein, in a second phase of operation, after a plurality of buffer parameters are set to predetermined values in a first phase of operation, the system compensates

for one or more of the following: an overflow event, an underflow event, a potential overflow event, and a potential underflow event.

25. (Previously Presented) The communication system of claim 23, wherein the buffer parameters are user-set.

26. (Previously Presented) The communication system of claim 24, wherein the buffer parameters are user programmable.